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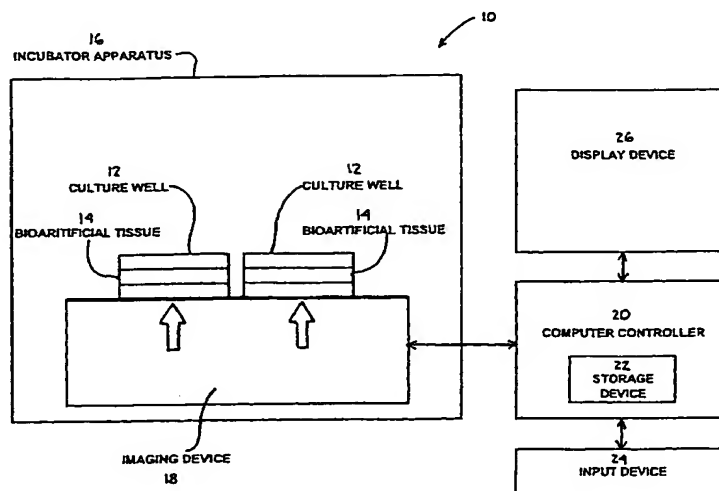
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(54) Title: **TISSUE ENGINEERED CONSTRUCT ANALYTICAL IMAGING SYSTEM AND METHOD OF OBTAINING AND ANALYZING IMAGES OF TISSUE ENGINEERED CONSTRUCTS**



(57) Abstract: Disclosed is a tissue engineered construct analytical imaging system (10) for use with culture wells (12) having tissue engineered constructs therein, which are positionable in an incubator apparatus (16) or other enclosed environment. The system (10) includes an imaging device (18) in operational communication with the enclosed environment for obtaining data reflective of a well area of interest in the culture well (12), without the removal of the culture well (12) from the enclosed environment. A computer controller (20) can receive data from the imaging device (18), analyze the data and determine desired parameters within the well area of interest and/or output data reflective of the results of the analysis. A computer-implemented method of obtaining and analyzing images of tissue engineered constructs is also disclosed.

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